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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/994,808	11/28/2001	Jun Hatakeyama	KOJIM-436	9099

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EXAMINER

LEE, SIN J

ART UNIT PAPER NUMBER

1752

DATE MAILED: 09/10/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicant(s) N .

09/994,808

Applicant(s)

HATAKEYAMA ET AL.

Examiner

Sin J Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3 and 5-9 is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Okutsu et al (JP 60-218642 and its English abstract).

The compound (I-8) shown on pg.3 of the Japanese document teaches present amine compound of the formula (1). In the present formula, R¹ would be an alkylene group of 4 carbon atoms, R² would be an alkylene group of 4 carbon atoms, and R³ would be an alkyl group of 2 carbon atoms.

3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Remenar et al (Chemical Abstract 127:277891 – abstract for Lithium 2,2,6,6-tetramethylpiperidide and lithium 2,2,4,6,6-pentamethylpiperidide: influence of TMEDA and related chelating ligands on the solution structures, Journal of Organic Chemistry, 62(17), pg.5748-5754).

The abstract shows the chemical structure for 1-(2-methoxyethyl)azetidine (see the second page of the abstract), and this compound teaches present amine compound of the formula (1). In the present formula, R¹ would be an alkylene group of 3 carbon atoms, R² would be an alkylene group of 2 carbon atoms, and R³ would be an alkyl group of 1 carbon atom.

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4. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Bartoshevich et al (Chemical Abstract 64:107193 – abstract for Mutagenic activity of N-substituted ethylenimines, Antibiotiki, 10(12), pg.1069-78).

Those two compounds shown on the third page of the abstract both teach present amine compound of the formula (1). For the first compound (1-(methoxymethyl)aziridine), present R¹ would be an alkylene group of 2 carbon atoms, present R² would be an alkylene group of 1 carbon atom, and present R³ would be an alkyl group of 1 carbon atom. For the second compound (1-(ethoxymethyl)aziridine), present R¹ would be an alkylene group of 2 carbon atoms, present R² would be an alkylene group of 1 carbon atom, and present R³ would be an alkyl group of 2 carbon atoms.

5. Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Ham et al (4,093,615).

Ham's compound shown in col.5, lines 5-10 teaches present amine compound of the formula (2). In the present formula, R¹ would be an alkylene group of 2 carbon atoms, R⁴ would be an alkylene group of 2 carbon atoms, R⁵ would be a single bond, and R⁶ would be a straight alkyl group of 17 carbon atoms.

6. Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Tsou et al (Chemical Abstract 59:21591 – abstract for Synthesis of possible cancer chemotherapeutic compounds based on enzyme approach. IV. Aziridine derivatives, Journal of Medicinal chemistry, 6(4), pg.435-9).

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Those three compounds which structures are shown on the second page of the abstract all teach present amine compound of the formula (2). For the first compound (1-Aziridineethanol, acetate), present R^1 of the formula (2) would be an alkylene group of 2 carbon atoms, present R^4 would be an alkylene group of 2 carbon atoms, present R^5 would be a single bond, and present R^6 would be a straight alkyl group of 1 carbon atom. For the second compound (2-(1-aziridiny)ethyl butanoic acid ester), present R^1 of the formula (2) would be an alkylene group of 2 carbon atoms, present R^4 would be an alkylene group of 2 carbon atoms, present R^5 would be a single bond, and present R^6 would be a straight alkyl group of 3 carbon atoms. For the third compound (1-aziridineethanol, propanoate), present R^1 of the formula (2) would be an alkylene group of 2 carbon atoms, present R^4 would be an alkylene group of 2 carbon atoms, present R^5 would be a single bond, and present R^6 would be a straight alkyl group of 2 carbon atoms.

7. Claim 4 is rejected under 35 U.S.C. 102(b) as being anticipated by Uzumaki et al (Chemical Abstract 71:40136).

The compound (3-(morpholinomethoxy)propionaldehyde dimethylacetal) shown on the second page of the abstract teaches present amine compound of the formula (4). In the present formula, R^1 would be an alkylene group of 4 carbon atoms which contain one ether group (Uzumaki's morpholino moiety is also exemplified by present specification, pg.8 (see the moiety (A)-5)), R^9 (Uzumaki's $-\text{CH}_2-\text{O}-\text{CH}_2-\text{CH}_2-\overset{|}{\text{CH}}-$) would be a trivalent organic group of 4 carbon atoms, and R^{10} would be an alkyl group of 1 carbon atom, and n would be 2.

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All wable Subj ct Matter

8. Claims 3 and 5-9 are allowed. None of the cited prior arts teaches or suggests the present amine compound of claim 3 or present resist composition of claim 5.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sin J. Lee whose telephone number is (703) 305-0504. The examiner can normally be reached on Monday-Friday from 8:30 am EST to 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Janet Baxter, can be reached on (703) 308-2303. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9311 for after final responses or (703) 872-9310 for before final responses.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-0661.

S. J. Lee

S. Lee

9/4/03



ROSEMARY ASHTON
PRIMARY EXAMINER